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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,840	11/12/2003	Thomas R. Ohnstein	H0005156 (1016.1140101)	9496
128	7590	12/13/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC.			ROJAS, BERNARD	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2832	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/712,840	<b>Applicant(s)</b> OHNSTEIN ET AL.	
	<b>Examiner</b> Bernard Rojas	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 15-17, 19-21 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 15-17, 19-21, 25-27 and 29-35 is/are allowed.
- 6) ☒ Claim(s) 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09222005</u> <u>95172004</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, filed 09/20/2005, with respect to the rejection(s) of claim(s) 1, 15 and 28 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made on claim 28 in view of Zavracky [US 5,638,946].

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Zavracky [US 5,638,946].

Claim 28, Zavracky discloses a flexible member, comprising: an elongated body [72]; one or more electrostatically actuated actuators [74] positioned at selected locations along the length of the elongated body, the one or more electrostatically actuated actuators, when activated, change the shape of the flexible member; and a controller for controlling the one or more electrostatically actuated actuators [col. 6 line 45 to col. 7 line 11].

***Allowable Subject Matter***

Claims 1-10, 15-17, 19-21, 25-27 and 29-35 are allowed.

The following is an examiner's statement of reasons for allowance:

Claim 1, the prior art of record does not teach nor suggest, in the claimed combination, an actuator device with a spine member having a length; a first plate and a second plate, the first plate fixed to the spine member at a first location along the length of the spine member and the second plate fixed to the spine member at a second location along the length of the spine member, wherein the second location is spaced from the first location; and a first actuator positioned between the first plate and the second plate for selectively creating a push and/or pull force between the first plate and the second plate to change the orientation of the first plate relative to the second plate the first actuator includes a first array of electrostatically actuated unit cells wherein at least some of the electrostatically actuated unit cells are actuated from an expanded state to a closed state in response to an applied electric potential and wherein at least some of the electrostatically actuated unit cells include: a first flexible member having a first electrode and a second flexible member having a second electrode wherein the first flexible member is attached to the second flexible member at selected spaced locations wherein the first flexible member is pulled toward the second flexible member when the electric potential is applied between the first electrode and the second electrode.

Claims 15, 29-31, 33 and 35, the prior art of record does not teach nor suggest, in the claimed combination, a flexible member with a spine member having a length; two or more plates attached at spaced locations along the length of the spine member,

selected plates forming a plate pair and one or more actuators positioned between and fixed to at least selected plate pairs for creating a push and/of pull force between the corresponding plate pair and to change the relative orientation of the plate pair.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*Bernard R. Rye*  
Br

*[Signature]*  
JANUARY 21 2009  
COMMUNICATIONS SECTION  
UNIT 2832